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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,665	04/13/2004	Toshinori Hirobe	03500.018077	3090

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EXAMINER	
KARIMI, PEGEMAN	

ART UNIT	PAPER NUMBER
2629	

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07/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,665	HIROBE ET AL.	
	Examiner	Art Unit	
	Pegeman Karimi	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 May 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 05/01/2007 has been entered and considered by examiner.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in 10/822665 on 04/13/2007. It is noted, however, that applicant has not filed a certified copy of the foreign priority documents as required by 35 U.S.C. 119(b). The letter "submission of priority document" filed on 07/07/2004 was received, however, the foreign priority documents have not been received.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Worn (U.S Patent 6,134,102).

As to claim 1, Worn (Fig. 1) discloses a display apparatus (1) comprising: an image display section (3); a housing (2) for supporting the image display section (3); and

first and second switch groups (right side of the screen group and left side of the screen group) arranged in the housing (2), with each switch
group including a plurality of switches having different functions from one another (each group includes a plurality of function switch 4). It is noted that each of switches 4 of the left or right side of the screen 3 must be different functions from each other because it does not make any sense that the same function switches are arranged in one side. (e.g. it does not make sense to arrange all switches on the right side to be only F1 function or delete function), wherein the first and second switch groups are arranged on a left side and a right side with respect to the image display section (Fig. 1, switch group 1 is located to the right and switch group 2 is located to the left of the screen), respectively, and
the plurality of the switches in the first switch group have the same functions as the plurality of switches in the second switch group (col. 4, lines 51-54). Worn clearly teaches "the operator can trigger the same function in a plurality of areas. The "areas" of Worn is meant the grip areas (6,7, and 8). Thus, the switches (4) of the left side can have the same functions as the switches (4) of the right side.

As to claim 2, Worn discloses a display apparatus (1) wherein the plurality of switches (4) is arranged on a display surface side (two sides of the display) of the image display (3) of the housing (2) (col. 4, lines 42-44).

As to claim 3, Worn (Fig. 1) discloses a display apparatus (1) wherein the plurality of switches (4) is arranged on either one of an upper edge side and a lower edge side (col. 4, lines 42-45) of the image display (3) section.

As to claim 4, Worn (Fig. 1) discloses a display apparatus (1) wherein the plurality of switches (4) is arranged on a left edge side and a right edge side (both sides, col. 4, lines 43-44) of the image display (3) section, respectively.

As to claim 8, Worn teaches wherein a distance between the first switch group arranged on the left side and the second switch group arranged on the right side is a distance (the distance between the two opposite side switches) wherein a user who is on one side of the right and left sides can not touch the switch group arranged on a side opposite to the one side without obstructing the image display section (Fig. 1, in order for a user standing on the right hand side of device 1 to reach the switches on the left hand side of the device he/she needs to obstruct the image display 3).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Worn (U.S. Patent 6,134,102), and in view of Shimabukuro (U.S. Patent 7,107,079)

As to claim 5, note the discussion of Worn above, Worn does not teach object sensor. Shimabukuro teaches an object sensor (touch sensor, col.2, lines 8-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the object sensor of Shimabukuro to the plurality of switches as taught by Worn because the sensor of Shimabukuro provide a key which the user intends to operate is detected by a touch sensor and an explanation of a function associated with the key is automatically displayed, thereby avoid performing any special operation (col.2, lines 27-29).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Worn (U.S. Patent 6,134,102) in view of Shimabukuro (U.S. Patent 7,107,079), as applied to claims 1 and 5, and further in view of Morgenthaler (U.S. Patent 6,310,609).

As to claim 6, note the discussion of Worn and Shimabukuro above, Worn and Shimabukuro do not teach bringing lights of ones of the plurality of switches into turn-on. Morgenthaler (Fig. 4) teaches a judging means (412) for bringing lights (light source, col.4, line 49) of ones of the plurality of switches (Fig. 1, 150) into a turned-on state (col. 6, lines 24-27) and lights of the others of the plurality of switches (Fig.5D, 326,328,334,340,342) into a turned-off state (Fig. 5D, col. 7, lines 65-67 & col. 8, lines 1-3) according to a result of sensing by the object sensor.

Morgenthaler does not teach the object sensor. Shimabukuro teaches the object sensor (Touch sensor, col. 2, lines 8-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the lights of the plurality of switches of Morgenthaler to the switches of Worn as modified by Shimabukuro because switches with light provide visually identifying the appropriate keys, which includes a light source mounted beneath each of the translucent keys so that when the light source is illuminated, the key associated with that light source will be illuminated for easy identification by the user (col. 1, lines 56-60).

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Worn (U.S. Patent 6,134,102) in view of Choi (U.S. Patent 6,684,264)

As to claim 7, note the discussion of Worn above. Worn teaches plurality of switches are arranged on the left side and the right side (col. 4, lines 53-54). Worn does not teach the switches arranged in symmetrical positions. Choi teaches push button s arranged in a symmetrical positions (Fig. 8, the push buttons on both sides of the screen are symmetrical). Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to have added the switch groups arranged in symmetrical positions of Choi to the programming device of Worn because it would simplify the operation of manual machine functions by dividing the functions into functional groups for fast operation (col. 1, lines 56-58).

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Worn (U.S. Patent 6,134,102) in view of Knox (U.S. Patent 6,525,750)

As to claim 9, note the discussion of Worn above. Worn does not teach the device is a rear projection display, Knox (Fig. 5A-5B) teaches the display apparatus being a rear projection display (col. 3, lines 3-5). Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to have added the rear-projection device of Knox to the programming device of Worn because the surface area of a rear-projection display's lid may be used to display images generated by the computer, which may allow larger images or smaller lids, or both (col. 2, lines 51-53).

Response to Arguments

10. Applicant's arguments filed on 05/01/2007 have been fully considered but they are not persuasive.

In view of amendement adding new claims 7-9, the references of Choi and Knox have been added for new ground of rejection.

On Page 7, lines 7-13, applicant states that the priority documents were attached to the submission of priority document filed on July 07, 2004. However, the documents have not been received. The documents are either lost or not attached to the letter of "submission of priority document". Applicant is requested to resubmit the priority

documents. So that they can fully comply and claim for foreign priority under 35 U.S.C 119(a)-(d).

On page 8, paragraph 4 the applicant argues that Worn does not teach or suggest among other features, first and second switch groups including a plurality of switches having different functions from one another. Worn does not mention first and second switch groups including a plurality of switches having different functions from one another, but it would not make sense if a plurality of keys in a switch group have the same function (i.e. F1 function or Delete function) since the function keys on this device control the movements and/or functions of the manipulator, so the keys on each switch group must be different than one another.

The applicant also argues that Worn does not teach or suggest among other features, the plurality of switches in the first group having the same function as the plurality of switches in the second switch groups. The examiner believes that Worn still reads on the claim. Worn clearly teaches the function keys (4) may also be present in multiple numbers and the operator can trigger the same function in a **plurality of areas** and **in different grip areas** (col. 4, lines 52-54).

On Page 9, paragraphs 1 and 2, Applicant argues that Shimabukuro and Morgenthaler fail to compensate for the deficiencies in Worn. Examiner believes that Worn clearly reads on the claims and the combination citation of Shimabukuro and Morgenthaler are proper.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiries

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pegeman Karimi whose telephone number is (571) 270-1712. The examiner can normally be reached on Monday-Thursday 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pegeman Karimi
06/23/2007

CHANH D. NGUYEN
SUPERVISORY PATENT EXAMINER